Fact Sheet for the Issuance of AZPDES Construction General Permit AZG2003-001

February 28, 2003

Facilities: AZPDES General Permit for Stormwater Discharges from Large and Small Construction Activity in Arizona, except for those in Indian Country.

Background: Section 405 of the Water Quality Act of 1987 (WQA) added section 402(p) of the Clean Water Act (CWA) which required the Environmental Protection Agency (EPA) to develop a phased approach to regulate stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) program. EPA published a final regulation on the first phase of this program on November 16, 1990, establishing permit application requirements for "stormwater discharges associated with industrial activity." EPA defined the term "stormwater discharge associated with industrial activity" in a comprehensive manner to cover a wide variety of facilities. Construction activities that disturb at least 5 acres of land and have point source discharges to waters of the U.S. are defined as an "industrial activity" per 40 CFR 122.26(b)(14)(x).

Phase II of the stormwater program was published in the Federal Register on December 8, 1999. Phase II includes sites disturbing greater that 1 acre and less than 5 acres as well as sites less than 1 acre of total land area that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than 1 and less than 5 acres. Small construction activity is defined per 40 CFR 122.26(b)(15)(i).

The following provides a fact sheet for the proposed AZPDES general permit for discharges in Arizona except for Indian Country. Hereinafter, the terms "permit" or "construction general permit" or "CGP" will be used. Note also that the permit references various federal regulations. These regulations have been incorporated by reference into the state AZPDES rules in the Arizona Administrative Code (A.A.C.) R18-9-A905. As an aid to reviewers, however, the permit cites the federal regulations where specific regulatory language can be found.

I. Introduction

ADEQ is issuing the construction general permit that authorizes the discharge of pollutants in stormwater discharges associated with construction activity. As used in this permit, "Stormwater associated with large construction activity" refers to the disturbance of five or more acres, as well as disturbance of less than 5 acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or more (40 CFR 122.26(b)(14)(x)). "Stormwater associated with small construction activity," as defined in 40 CFR 122.26(b)(15), refers to the disturbance of equal to or greater than 1 and less than 5 acres of land for construction or the disturbance of less than 1 acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than 1 and less than five acres. The AZPDES rules, A.A.C. R18-9-A905 incorporate these, and other NPDES federal regulations noted in this Fact Sheet, by reference.

This permit replaces the previous Construction General Permit which was issued for a five-year term by EPA Region 9 in February 1998 (63 FR 7858) and July 1998 (63 FR 36490).

II. Coverage Provided by General Permits

Section 402(p) of the Clean Water Act (CWA) states that stormwater discharges associated with industrial activity to waters of the United States must be authorized by an NPDES permit. The term "discharge" when used in the context of the NPDES/AZPDES program means the discharge of pollutants (40 CFR 122.2).

EPA issued the first round of the Phase I construction general permit on two dates: September 9, 1992, for certain States and territories, and September 25, 1992, for other States and territories where EPA was the Permitting Authority. The Phase I permit was commonly referred to as the Baseline Construction General Permit. The second-round permit (simply called the "construction general permit," "CGP," or "permit"), issued February 17, 1998, was for use in the States, territories and Indian country lands where EPA was the NPDES Permitting Authority.

On November 16, 1990, EPA published regulations under the NPDES program that defined one facet of the phrase "stormwater discharges associated with industrial activity" as being discharges from construction activities (including clearing, grading and excavation activities) that result in the disturbance of 5 or more acres of total land area, including smaller areas that are part of a larger common plan of development or sale (40 CFR 122.26(b)(14)(x)). These are commonly referred to as Phase I construction activities.

The regulation entitled "National Pollutant Discharge Elimination System - Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges" (64 FR 68722) was published by EPA on December 8, 1999. This regulation, which is considered Phase II of the stormwater program, expands the existing NPDES stormwater program to address discharges that result in land disturbance of equal to or greater than 1 and less than 5 acres or less than 1 acre if part of a larger common plan of development or sale. The Stormwater Phase II Rule automatically designates these small sites; however, this rule allows for the exclusion of certain sources from the national program based on a demonstration of the lack of impact on water quality, as well as the inclusion of others based on a higher likelihood of localized adverse impact on water quality. Exclusion from the program is available through waivers to operators of small construction activity who certify for one of the available waivers.

There may be confusion about permitting requirements for sites that are part of a larger common plan of development or sale. All large construction activity, regulated under 40 CFR 122.26(b)(14)(x), is required to obtain coverage under a stormwater permit including sites disturbing less than 5 acres that are part of a larger common plan of development or sale that has the potential to disturb five or more acres collectively. A similar permit requirement exists for small construction activity, regulated under 40 CFR 122.26(b)(15)(i), that disturbs less than 1 acre but is part of a larger common plan of development or sale having the potential to disturb at least 1, but less than 5 acres collectively. Examples of these would be lots in a subdivision or industrial park. Construction projects that disturb less than 1 acre not meeting these requirements may still be designated to be covered under this permit based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the U.S. (40 CFR 122.26(b)(15)(ii)).

To help clarify what projects must be addressed as part of a "common plan of development or sale" and what projects can be considered on their own merit, ADEQ provides the following consistent with EPA interpretation. Where discrete construction projects within a larger common plan of development or sale are located at least 1/4 mile apart and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan"is not concurrently being disturbed. For example, two oil and gas well pads separated by 1/4 mile could be treated as separate "common plans." However, if the same two well pads and an interconnecting access road were all under construction at the same time, they would need to be considered part of a single "common plan" for permitting purposes. If a utility company was constructing new trunk lines off an existing transmission line to serve separate residential

subdivisions located more than 1/4 mile apart, the two trunk line projects could be considered to be separate projects.

For situations where a common plan of development or sale exists and a single SWPPP is developed for an entire site, the requirements and burdens associated with maintaining permit compliance can be commensurately reduced as portions of the site are stabilized. For example, BMPs may be removed and inspections ceased for a stabilized area, as long as the threat of pollutants in any discharges from the area resulting from construction or construction-related activities no longer exists. It is not necessary to revise the NOI in this situation. Instead, the construction operator must thoroughly document in the SWPPP all activities leading up to and including final stabilization, so that an inspector will understand that BMPs and regular inspections are no longer needed in that area.

III. Summary of Options for Controlling Pollutants

ADEQ is providing the following information on controlling pollutants in stormwater discharges to assist permittees in preparing stormwater pollution prevention plans (SWPPPs). Most controls for construction activities can be categorized in either of two groups: sediment and erosion controls and stormwater management measures.

Sediment and erosion controls ordinarily address pollutants in stormwater generated from the site during active construction-related work. Stormwater management measures are customarily installed before, and coincident with, completion of construction activities, but primarily result in reductions of pollutants in stormwater discharged from the site after the construction has been completed. Additional measures that should be employed throughout a project include housekeeping best management practices, such as materials management and litter control.

A. Sediment and Erosion Controls. Erosion controls provide the first line of defense in preventing off-site sedimentation and are designed to prevent erosion through protection and preservation of soil. Sediment controls are designed to remove sediment from runoff before the runoff is discharged from the site. Sediment and erosion controls can be further divided into two major classes of controls: stabilization practices and structural practices. Major types of sediment and erosion practices are summarized below. A more thorough description of these practices is given in "Stormwater Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices," U.S. EPA, 1992 (www.epa.gov/npdes/pubs/owm0307.pdf). Permittees should also consider the construction of new projects in phases to minimize the amount of bare soil which is exposed at one time and the amount of stabilization or structural controls that would be required.

1. Stabilization Practices.

Stabilization refers to covering or maintaining an existing cover over soil. Vegetative cover includes grass, trees, vines, shrubs, etc. Stabilization measures can also include non-vegetative controls such as geotextiles, riprap or gabions (wire mesh boxes filled with rock). Mulches such as straw or bark can be somewhat effectual at stabilization in stand-alone fashion but are most effective when used in conjunction with vegetation.

Stabilization of exposed soil is one of the foremost means to minimize pollutant discharge during construction activities. Stabilization reduces erosion potential by absorbing the kinetic energy of raindrops that would otherwise mobilize unprotected soil; by intercepting water so that it infiltrates into the ground instead of running off the surface; and slowing the velocity of runoff, thereby promoting deposition of sediment already being carried. Stabilization provides large reductions in the levels of suspended sediment in discharges and receiving waters. Examples of stabilization measures are summarized as follows.

a. Temporary Seeding. Seeding of temporary vegetation provides stabilization by

establishing vegetative cover at areas of the site where earth disturbing activities have temporarily ceased, but will resume later in the construction project. Without temporary stabilization, soil can be exposed to precipitation for an extended period leaving it vulnerable to erosion, even though earth-disturbing activities are not occurring on these areas. Temporary seeding practices have been found to be up to 95% effective in reducing erosion.[1]

b. Permanent Seeding. Establishing a permanent and sustainable ground cover at a site stabilizes the soil and hence reduces sediment in runoff. Permanent seeding is typically required at most sites for aesthetic reasons.

c. Mulching. Mulching is often done coupled with permanent and temporary seeding. Where temporary or permanent seeding is not feasible, exposed soil can be stabilized by spreading plant residues or other suitable materials on the soil surface. Although generally not as effective as vegetation, mulching by itself provides a measure of temporary erosion control. Mulching in conjunction with seeding provides erosion protection prior to the onset of plant growth. In addition, mulching protects newly-applied seeds, providing a higher likelihood of successful vegetation. To maintain its effectiveness, mulch should be anchored to resist wind displacement.

d. Sod Stabilization. Sod stabilization involves establishing long- term stands of grass by planting sod on exposed surfaces. When maintained properly, sod can be more than 99% effective in reducing erosion, and is the most immediately effective vegetation method available. However, the cost of sod stabilization (relative to other vegetative controls) typically limits its use to situations where a quick vegetative cover is desired (e.g., steep or erodible slopes) and sites which can be maintained with ground equipment. Sod is also sensitive to climate and may require intensive watering and fertilization.[2]

e. Vegetative Buffer Strips. Vegetative buffer strips are indigenous or replanted strips of vegetation located at the top and bottom of a slope, outlining property boundaries or adjacent to receiving waters such as streams or wetlands. Vegetative buffer strips can slow runoff at critical locations, decreasing erosion and allowing sedimentation. They can be especially useful for very narrow linear construction projects such as underground utilities or pipelines.

f. Preservation of Trees. This practice involves preserving selected trees already on-site prior to development. Mature trees provide extensive canopy and root systems which protect and hold soil in place. Shade trees also keep soil from drying rapidly, decreasing the soil's susceptibility to erosion. Measures taken to protect trees can vary significantly, from simply installing tree armor and fences around the drip line, to more complex measures such as building retaining walls and tree wells. Along with the erosion benefits provided by trees, they can also add to the aesthetics and value of the property.

g. Contouring and Protection of Sensitive Areas. Contouring refers to the practice of building in harmony with the natural flow and contour of the land. By minimizing changes in the natural contour of the land, existing drainage patterns are preserved as much as possible, thereby reducing erosion. Minimizing the

[1]Guidelines for Erosion and Sediment Control in California; USDA, Soil Conservation Service, Davis, CA; revised 1985.

[2]Ibid.

amount of regrading done will also reduce the amount of soil being disturbed. The preservation of sensitive areas at a site such as steep slopes and wetlands should also be a priority. Disturbance of soil on steep slopes should be avoided due to vulnerability to erosion. Wetlands should be protected because they provide flood protection, pollution mitigation and an essential aquatic habitat.

2. Structural Practices.

Structural practices involve the installation of devices to divert, store or limit runoff. Structural practices have several objectives. First, structural practices can be designed to prevent water from flowing on disturbed areas where erosion may occur. This involves diverting runoff from undisturbed, up-slope areas through use of earth dikes, temporary swales, perimeter dikes or other diversions to stable areas. Another objective of structural practices may be to cause sedimentation before the runoff leaves the site. Methods for removing sediment from runoff include diverting flows to a trapping or storage device or filtering diffuse flows through on-site silt fences. All structural practices require proper maintenance (e.g., removal of collected sediment) to remain functional and should be designed to avoid presenting a safety hazard - especially in areas frequented by children.

a. Earth Dikes. Earth dikes are temporary berms or ridges of compacted soil that channel water to a desired location. Earth dikes should be stabilized with vegetation or an equally efficacious method.

b. Silt Fences. Silt fences are a barrier of geotextile fabric (filter cloth) used to intercept sediment in diffuse runoff. They must be firmly anchored and may require additional support, such as reinforcing with wire mesh. Used alone, silt fences are usually inappropriate for flows of concentrated high volume or high velocity. They must be carefully maintained to ensure structural stability and be cleaned of excess sediment.

c. Drainage Swales. A drainage swale is a channel lined with grass, riprap, asphalt, concrete or other materials. They are installed to convey runoff without causing erosion.

d. Sediment Traps. Sediment traps are installed in drainage pathways, at storm drain inlets or other discharge points from disturbed areas. They are temporary structures designed to reduce water velocity and subsequently allow soil particles to settle.

e. Check Dams. Check dams are small temporary dams constructed across a swale or drainage ditch to reduce the velocity of runoff, thereby reducing erosion in the swale or ditch. They should not be used in a permanent stream. More elaborate erosion controls in a flow conduit may be unnecessary if check dams are installed, due to the decrease in energy of the runoff.

f. Level Spreaders. Level spreaders are outlets for dikes and flow channels consisting of an excavated depression constructed at zero grade across a slope. Level spreaders convert concentrated runoff into diffuse flow and release it onto areas stabilized by existing vegetation.

g. Subsurface Drains. Subsurface drains transport runoff to an area where the water can be managed effectively. Drains can be made of tile, pipe, or tubing.

h. Pipe Slope Drains. A pipe slope drain is a temporary runoff conveyance running down a slope to prevent erosion on the face of the slope.

i. Temporary Storm Drain Diversions. Temporary storm drain diversions are used to re-direct flow in a storm drain for capturing sediment in a trapping device.

j. Storm Drain Inlet Protection. Storm drain inlet protection reduces sediment entering storm drainage systems prior to permanent stabilization of disturbed areas. Examples include a sediment filter or an excavated detention area around a storm drain inlet.

k. Rock Outlet Protection. Rock protection placed at the outlet of conduits can reduce the depth and velocity of water so the flow will not cause downstream erosion.

l. Other Controls. Examples of other controls include temporary sedimentation basins, sump pits, entrance stabilization, waterway crossings and wind breaks.

B. Stormwater Management Measures. Stormwater management measures are usually installed before, and coincident with, completion of construction activities. The measures primarily result in reductions of pollutants in stormwater discharged from the site after cessation of construction activities. Stormwater management may also be needed for compliance with local flood control requirements (which may be unrelated to AZPDES requirements).

Construction frequently causes significant alterations in the characteristics of the affected land. One such change is an increase in the overall imperviousness of the site, which can dramatically affect the site's flow patterns. An increase in runoff may increase the amount of pollutants carried by the runoff. In addition, some activities (e.g., automobile travel on newly-built roads) can result in higher pollutant concentrations in runoff compared to pre-construction levels. Traditional stormwater management controls attempt to limit increases in the amount of runoff and pollution discharged from land impacted by construction.

Stormwater management measures include, but are not limited to, on-site infiltration of runoff, flow attenuation by vegetation or natural depressions, outfall velocity dissipation devices, stormwater retention basins and artificial wetlands, and stormwater detention structures. For many sites, a combination of these controls is appropriate. A summary of stormwater management controls is provided below. A more complete description of stormwater management controls is found in 'Stormwater Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices," U.S. EPA, 1992, and "A Current Assessment of Urban Best Management Practices," Metropolitan Washington Council of Governments, March 1992. In designing stormwater controls, features that would pose a safety hazard - especially for children - should be avoided and/or have limited public access.

1. On-Site Infiltration. Inducing infiltration, through infiltration trenches or basins, can reduce the volume and pollutant loadings of stormwater discharges from a site. Infiltration measures tend to mitigate impacts to an area's natural hydrologic characteristics. Properly designed and installed infiltration constructs can reduce peak discharges, facilitate recharging of the groundwater, augment low flow conditions in receiving streams, reduce stormwater discharge volumes and pollutant loads, and inhibit downstream erosion.

   Infiltration measures are particularly effective in permeable soils and where the water table and bedrock are well below the surface. Infiltration basins can also double as sediment basins during construction. Infiltration trenches can be easily incorporated into less active areas of a development and are appropriate for small sites and in-fill developments. However, trenches may require regular maintenance to prevent clogging, particularly where grass inlets or other sedimentation measures are not

used. In some situations, such as low density areas of parking lots, porous pavement can provide for infiltration.

2. Flow Attenuation by Vegetation or Natural Depressions. Flow attenuation caused by vegetation or natural depressions can facilitate pollutant removal and infiltration and can reduce the erosivity of runoff. Use of vegetative flow attenuation measures can protect habitats and enhance the appearance of a site. These measures include grass swales and filter strips as well as trees that are either preserved or planted during construction.

   Given their limited capacity to accept large volumes of runoff (and the concomitant erosivity), vegetative controls should usually be used in combination with other stormwater devices. Incorporating check dams into flow paths can provide additional infiltration and flow attenuation. Grass swales are typically used in areas such as low or medium density residential development and highway medians as an alternative to curb and gutter drainage system. In general, the costs of vegetative controls are less than for other stormwater measures.

3. Outfall Velocity Dissipation Devices. Outfall velocity dissipation devices include riprap and stone or concrete flow spreaders. They slow the flow of water discharged from a site thereby reducing erosion.

4. Retention Structures/Artificial Wetlands. Retention structures are ponds and artificial wetlands that are designed to maintain a permanent pool of water. Properly installed and maintained retention structures (also known as wet ponds) and artificial wetlands can achieve a high removal rate of sediment, biochemical oxygen demand (BOD), organic nutrients and metals, and are most cost-effective when used to control runoff from larger, intensively developed site. These constructs rely on settling and biological processes to remove pollutants. Retention ponds and artificial wetlands can also become wildlife habitats, recreation, and landscape amenities, and increase local property values.

   While artificial wetlands can be one of the most effective long-term stormwater management measures, there are also potential problems to which wetlands may contribute at certain sites. This could be the case at airports where bird populations drawn to wetlands proximate to runways/taxiways may endanger moving aircraft. It is recommended that structures that maintain continuous habitat for wildlife not be constructed within 10,000 feet of a public-use airport serving turbine-powered aircraft, or within 5,000 feet of a public-use airport serving piston-powered aircraft.

5. Water Quality Detention Structures. Stormwater detention structures, which include extended detention ponds, control the rate at which water drains after a storm event. Extended detention ponds are usually designed to completely drain in about 24 to 48 hours and to remain dry at other times. They can provide pollutant removal efficiencies similar to those of retention pond. Extended detention systems are typically designed to provide both water quality and water quantity (flood control) benefits.

C. Housekeeping Best Management Practices (BMPs). Pollutants that could be discharged in stormwater from construction sites because of poor housekeeping include oil, grease, paints, gasoline, concrete truck wash down, raw materials used in the manufacture of concrete (sand, aggregate, and cement), solvents, litter, debris and sanitary wastes. Construction site stormwater pollution prevention plans (SWPPPs) should address the following to prevent the discharge of pollutants:

- Designate and control areas for equipment maintenance and repair;

- Provide waste receptacles at convenient locations and regular collection of wastes;
- Locate equipment wash down areas on site, and provide appropriate control of washwater to prevent unauthorized dry weather discharges and avoid mixing with stormwater;
- Provide protected storage areas for chemicals, paints, solvents, fertilizers, and other potentially toxic materials; and
- Provide adequately maintained sanitary facilities.

IV. Summary of Permit Conditions

This section has been written in an informal style that does not reflect verbatim the actual language used in the permit. It is intended to help the regulated community and members of the public understand the intent and basis of the actual permit language. If any confusion or conflicts exist between this summary and the actual CGP language, the permittee must comply with the CGP as written.

Part I. Coverage Under This Permit

Introduction: This Construction General Permit (CGP) authorizes stormwater discharges from large and small construction-related activities that result in a total land disturbance of equal to or greater than 1 acre, where those discharges enter surface waters of the U.S. or a storm drain. Note the AZPDES authorizing statute uses the term "Navigable Waters" which is defined as equivalent to the waters of the U.S. However, because the term 'navigable waters' can be confusing to the general public (i.e., the definition of 'navigable waters' also includes ephemeral washes, intermittent streams, playas, and wetlands, that may not be able to be traveled by conventional vessels), this permit generally references discharges to waters of the U.S. This permit expands coverage from the 1998 CGP that provided coverage for large construction sites (i.e., those disturbing greater than 5 acres) to include both small and large construction activities (i.e., any project disturbing greater than 1 acre).

Similar to the 1998 CGP, the goal of this permit is to reduce or eliminate stormwater pollution from construction activity through development and implementation of an appropriate stormwater pollution prevention plan.

A. **Permit Area**. This permit will be for all construction discharges in the state of Arizona, except for those in Indian Country. ADEQ does not have authority for such discharges and applicants must pursue permitting through EPA Region 9 or other appropriate permitting authority.

Each permittee operating under this permit will be assigned an Authorization Number when his or her Notice of Intent (NOI) is processed. Note that the assigned number is not an AZPDES Permit Number; rather, the assigned number is for tracking purposes only. The actual permit number is AZG2003-001.

B. **Eligibility and Allowable Stormwater Discharges.** This permit authorizes all discharges of stormwater from construction activities except those excluded under Limitations on Coverage (Part I, Section D) in the CGP. Coverage under the CGP is authorized for:

- Stormwater discharges associated with construction activities from either large or small construction sites (including stormwater discharges from operators disturbing less than 1 acre that are part of a larger common plan of development or sale that combined, disturbs 1 acre or more);
- Stormwater discharges from operators disturbing less than 1 acre, but designated by ADEQ as requiring coverage under the CGP;
- Stormwater discharges from construction site support activities provided that these support activities are directly related to a construction site with NPDES/AZPDES CGP coverage;
- Non-stormwater discharges as noted in Part I Section C of the permit; and

- Any discharge authorized by a different NPDES/AZPDES permit commingled with discharges authorized by this permit.

As noted above, activities that occur on-site in support of construction activity are covered under the CGP. Specifically, the permit authorizes discharges from construction support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, etc.) for local project(s) with which an operator is currently involved (e.g., a concrete batch plant providing concrete to several different highway projects in the same county). Authorization of this discharge is contingent upon (1) the support activity not being a commercial operation serving multiple, unrelated construction projects and not operating beyond the completion of the last related construction project it serves; and (2) appropriate controls are identified in the stormwater pollution prevention plan (SWPPP) for the discharges from the support activity areas.

C. Allowable Non-Stormwater Discharges. This permit authorizes certain non-stormwater discharges associated with construction activity, provided that they are not a significant source of pollutants and the non-stormwater component is in compliance with Part IV.D.7 of the permit. Specifically, operators are required to identify in the SWPPP all allowable sources of non-stormwater discharges and must identify and ensure the implementation of appropriate BMP measures for these discharges. The operator must also eliminate or reduce these discharges to the extent feasible. Allowable non-stormwater discharges include those listed in Part I.C of the CGP.

D. Limitations on Coverage. Not all stormwater discharges from construction sites are authorized by this permit. Specifically excluded are:

Post Construction Discharges. Stormwater discharges originating from a site after construction activities have ceased, the site has undergone final stabilization, and an NOT has been submitted. If there will be a discharge of stormwater associated with industrial activity, or some other regulated discharge from the completed project (e.g., wastewater from a newly-constructed chemical plant), coverage under another permit(s) must be obtained for these discharges.

Prohibition on Discharges Mixed With Non-Stormwater. Stormwater discharges that are mixed with non-stormwater sources, other than those specifically identified in and managed in compliance with the permit. Non-stormwater discharges that are authorized under a different NPDES/AZPDES permit may be commingled with discharges authorized under this permit.

***Discharges Covered by Another Permit*.** Stormwater discharges associated with construction activity that are covered under an individual permit or discharges required to be covered under an alternative general permit.

Discharges Threatening Water Quality. The inclusion of the requirement for a permittee to assure attainment of water quality standards (WQS) is intended to satisfy 40 CFR 122.44(d) without incorporating specific water quality-based effluent limitations. In a general permit, ADEQ is unable to include site-specific requirements to assure attainment of WQS at every site covered by this permit without adequate prior knowledge of the intended discharges, receiving waters, etc. Therefore, this permit requires permittees to design and implement BMPs to ensure compliance.

In addition, ADEQ requires review of stormwater discharge from construction sites to impaired or unique waters. Because impaired and unique waters require additional protection, the Department is proposing additional review of projects in the 1/4 mile proximity prior to authorizing discharge under the general permit. Although depending on factors such as slope, permeability, and rainfall event, some projects may feasibly impact waters from an

even greater distance. Based on these same factors, ADEQ also realizes that in some cases 1/4 mile may be beyond the range of concern. However, the Department considers that 1/4 mile is a reasonable distance to screen potential projects that may require additional evaluation.

If a total maximum daily load (TMDL) has been established for an impaired receiving water body, eligibility for permit coverage requires the development and certification of a SWPPP that is consistent with the assumptions and requirements of the TMDL. For a situation where a TMDL has not specified a waste load allocation for construction stormwater discharges, but has not specifically concluded that waste load allocations are unnecessary, an applicant must develop and implement BMPs that will ensure the discharge is consistent with the TMDL.

Applicants proposing to discharge to a unique or impaired water must submit their SWPPP to the Department for review along with their NOI. The SWPPP must also contain a proposal for monitoring the discharges to ensure the effectiveness of BMPs. Discharges to impaired or unique waters are not authorized by this permit for a minimum of 32 business days. Additionally, if the Department advises the applicant within 32 business days of problems in the SWPPP, authorization may be further delayed.

E. Waivers for Small Construction Activities. Phase II extends the requirements of the stormwater program from construction sites disturbing five or more acres (large construction) to sites disturbing between 1 and 5 acres (small construction), although ADEQ may also waive small construction sites that do not have adverse water quality impacts. To receive a waiver, the operator of a small construction activity must certify to a low predicted rainfall erosivity or lack of water quality impacts.

A low predicted rainfall erosivity exists during the period of construction activity resulting in a period when the value of the rainfall erosivity factor is less than 5. If the construction activity extends past the dates specified in the waiver certification, the operator must recalculate the waiver using the original start date and a new ending date. If the R-Factor is still under 5, a new waiver certification form must be submitted. If the recalculated R-Factor is greater than 5, an NOI must be submitted prior to the end of the waiver period for the operator to be covered by the permit. To determine the R value, the operator must use the method in EPA Fact Sheet 3.1, EPA 833-F-00-014, or the ADEQ “Smart NOI” electronic system will be able to be accessed from the internet and will calculate the values based on operator input of locational data and dates for construction.

A determination that stormwater controls are not necessary may also be based on a TMDL approved or established by EPA that addresses the pollutant(s) of concern. Currently, this waiver is of limited use as TMDLs in Arizona have not specifically addressed construction activities; however, this waiver has been included as it has the potential to be of use to operators in the future.

The permit also includes a provision that small sites that are exempt from permit coverage need to implement appropriate BMPs to minimize discharges from their site. In the event the sites have problematic discharges, ADEQ may require permit coverage to be obtained.

Part II. Authorization Under this General Permit

A. General. Operators of construction sites greater than 1 acre, or those designated by ADEQ, are required to submit a Notice of Intent (NOI) to obtain permit coverage (40 CFR 122.28(b)(2)). Submission of a complete and accurate NOI eliminates the need to apply for an individual permit for a regulated discharge, unless ADEQ specifically notifies the discharger that an individual permit application must be submitted.

Only NOI forms provided by ADEQ (or reproductions thereof) are valid. Applicants must be aware that by signing and dating the form they certify that they understand and are willing to comply with all terms and conditions of the AZPDES Construction General Permit. ADEQ intends in the near future to make available the Smart NOI System that will allow forms to be accessed and completed on the internet. The system will be designed to aid the operator in completing the NOI and will calculate and complete much of the form on behalf of the operator. To date, the issue of electronic signature has not been fully resolved, thus the operator may in the interim need to print and review a copy of the completed form and submit it with the properly signed certification to ADEQ. However, ADEQ envisions that the Smart NOI will enable the user to more easily complete the form and receive a more timely response from the agency concerning authorization status.

At any given construction site there may be a number of operators. Each entity considered an operator of large or small construction activity, must submit an NOI. The definition of "operator" and the existing regulatory definitions of "owner or operator" and "facility or activity" have been included in the permit. In general terms, operators are those that have the ability to make decisions concerning the project design and details, and those with the ability to make on the site decisions concerning site activities and implementation of BMPs.

EPA has indicated that situations exist where a utility company installing service lines meets the definition of operator and must obtain permit coverage, although most of the time a utility would be considered a "subcontractor" (i.e., non-permittee). If a utility company is constructing a project for itself (e.g., main transmission line, transformer station) it must obtain permit coverage. Utility companies (as any subcontractor) must abide by the site's SWPPP provisions and minimize its impacts on stormwater controls.

B. Effective Date of Permit Coverage. In most cases, authorization is granted 2 business days after the Water Quality Division of ADEQ receives the NOI. Because of uncertainty expressed concerning the word 'received', the definitions specify how this term will be used and the acceptable mechanisms for delivery of an NOI to ADEQ. An authorization to discharge is not, however, automatically granted 2 business days after receipt if a submitted NOI is materially incomplete or incorrect or if discharge(s) is/are not eligible for coverage by the permit. At any point, ADEQ may deny coverage under this permit and require submittal of an application for an individual AZPDES permit based on a review of the NOI or other information.

If an NOI is submitted after construction activity has begun, the operator is authorized for discharges that occur after ADEQ confirms authorization (in most cases 2 business days after receipt). The Agency may seek enforcement action for any unpermitted discharges or permit non-compliance that occurred between the time construction began and discharge authorization.

Operators applying for a TMDL waiver are to submit this information at least 32 business days in advance of the project. Those planning projects in TMDL areas or areas near impaired waters are not authorized to discharge until they have received written confirmation from ADEQ.

Because they are not federal actions, AZPDES permits are not subject to the Section 7 consultation under the Endangered Species Act. Therefore, this permit does not require any documentation of eligibility with respect to this issue, however, operators should be aware they may be subject to other requirements under the ESA. This permit provides for screening of NOI forms for a variety of issues and ADEQ has agreed to screen certain areas on behalf of the US Fish & Wildlife Service (USFWS). In the event a project is located in an area of concern, authorization to discharge under this permit will be delayed for up to 30 business days, and the NOI information will be forwarded to the USFWS. Operators may subsequently be contacted by USFWS concerning any potential issues related to

endangered species or critical habitat protection. In such cases, or when there are TMDLs or other water quality concerns, ADEQ intends to postpone authorization to discharge for up to 30 business days pending further review by the affected agencies. ADEQ has a goal to advise applicants of any potential delay within 2 business days after receipt of NOI information, and believes in most cases this will be achieved when the Smart NOI system is fully employed. It is ADEQ's intent in all cases- except for discharges to impaired or unique waters, that after a total of 32 business days, the applicant can assume coverage under the permit unless ADEQ further advises applicants to the contrary.

C. Termination of Coverage. Permittees must submit a complete Notice of Termination (NOT) that is signed according to Part VII, Section K of the permit when one or more of the conditions contained in Part II, Section C of the permit have been met. NOTs must be submitted using the form provided by ADEQ (found as an attachment to the permit), or a reproduction thereof, and sent to the address specified on the form. ADEQ envisions the NOT will also be able to be completed via use of the Smart NOI database in the future. NOTs provide ADEQ with a useful mechanism to track the status of projects which are actively covered by the permit.

The NOT includes:

- Permittee name and contact information, and site location information;
- The AZPDES permit tracking number of the site that is being terminated;
- Permittee certification that he or she understands that submission of the NOT means he or she no longer will have authorization to discharge stormwater associated with construction activity and that the site has been stabilized so that stormwater discharges associated with construction activity are no longer occurring
- Clarification that the authorization to discharge ends at midnight of the day the NOT is received at ADEQ; and
- The conditions under which an NOT can be submitted (stormwater discharges associated with the construction activity have been eliminated, the operator of the site has changed, coverage under an alternative permit has been obtained, or for residential construction only, temporary stabilization has been completed and the residence has been transferred to the homeowner) In some cases, an operator may complete only a small part of a site project and final stabilization is left and will be completed at a later date by another operator. In this scenario, the first operator may file an NOT.

The NOT must be filed within 30 days after cessation of construction activities and final stabilization of the permittee's portion of the site (or temporary stabilization for residential construction where a homeowner is assuming control of a property). An NOT must also be submitted by a permittee before another operator assumes the previous permittee's liabilities. This new permittee must then submit an NOI for coverage under this permit. If the operator submits and is covered by a low erosion potential or TMDL waiver, continued compliance with the permit is not necessary nor is submittal of an NOT.

The operator may face enforcement action if an NOT is submitted without meeting one of the requirements of the permit unless there has been authorization under an alternative permit or a waiver for coverage under this permit has been approved.

The NOT must be submitted to the address listed in Part III, Section E of the permit.

Part III. Notice of Intent Requirements

- An NOI must be submitted by all operators seeking authorization for stormwater discharges from a construction site under the CGP. Those required to obtain an individual stormwater permit may not use an NOI and should contact ADEQ regarding the permitting process. The

NOI form requires the following information:

- The construction site operator's name, address, telephone number;
- Whether the site is a Federal project or located on Federal lands;
- The name (or other identifier), address (description of location if street address is unavailable), county or similar governmental subdivision, and the latitude/longitude of the construction site (e.g., “Cactus Acres Subdivision, 123 South St., Gold Mine City, Our County, AZ” or “1 mile south of Gold Mine City, AZ, on County Road No. 1; Gold Mine City, Our County, AZ”). Help finding your latitude and longitude will be available with the Smart NOI system. Also, if you will be involved in many construction projects, you may wish to invest in a portable Global Positioning System (GPS) unit that provides read-outs of the latitude and longitude. Units designed for recreational use (e.g., boating, hiking) can cost less than $100.
- Whether the site is located solely on Indian country land. Note again the permit does not authorize such discharges and the applicant will be directed to EPA. If the construction site is in Indian Country and outside Indian Country, then the operator must apply for coverage under both the ADEQ permit and the EPA permit (or other permitting authority).
- The location of where the plan can be viewed if different from the project address and the name and telephone number of a contact person for scheduling viewing times;
- The name of the receiving water(s), or if the discharge is through a municipal separate storm sewer system, the name of the municipal operator of the storm sewer (e.g., “Nimby Creek” or “Anyburg, AZ ” for municipal storm sewers). Help finding your receiving waters will be available with the Smart NOI system;
- An estimate of project start date and completion date and an estimate of the number of acres (to the nearest quarter acre) of the site on which soil will be disturbed. Note that the project start and stop dates need not be exact. ADEQ recognizes that many factors, often beyond the permittee's control, contribute to whether a project will actually start or end on the estimated dates. Acreage may be determined by dividing square footage by 43,560, as demonstrated in the following example:

    - Convert 100,000 ft^2 to acres:
    - Divide 100,000 ft^2 by 43,560 square feet per acre:
    - 100,000 ft^2 ÷43,560 ft^2/acre = 2.30 acres. Report 2.25 acres on the NOI Form.
    - A summary of any non-stormwater discharges anticipated at the site. Note also, that such discharges, unless otherwise specifically authorized by this permit, may **not** be allowable regardless of inclusion on the NOI form.
    - A signature block is provided following a certification statement that everything on the NOI form is correct. Also, the NOI must include the name and title of the person who is authorized per VII.K.1 to sign the form, and date of signature.

The NOI must be signed in accordance with the signatory requirements of 40 CFR 122.22. A complete description of these signatory requirements is provided in Part VII.K of the general permit.

Waivers for Certain Small Construction Activities

Regulations for Phase II of the NPDES Stormwater Program were published on December 8, 1999 (64 FR 68722). Phase II was in response to the Congressional mandate at Clean Water Act § 402(p)(6) that the Agency “...shall issue regulations...which designate stormwater discharges...to be regulated to protect water quality and ...establish a comprehensive program to regulate such designated sources.” Under Phase II, EPA designated small construction projects disturbing at least 1 but less than 5 acres, but by providing for two types of waivers acknowledged that not every construction project in the 1-5 acre range would pose a potential threat to water quality.

EPA adopted two types of waivers within the definition of small construction at 40 CFR 122.26(b)(15). The Rainfall-Erosivity Waiver at 40 CFR 122.26(b)(15)(i)(A) is based on the “R” factor from the Revised Universal Soil Loss Equation (RUSLE) and applies to projects where (and when) negligible

rainfall/runoff-erosivity is expected. The Water Quality Waivers at 40 CFR 122.26(b)(15)(i)(B) are essentially based on an analysis that stormwater discharges from small construction activities would not be expected to cause or contribute to exceedances of water quality standards. The water quality waivers anticipated that the analysis would demonstrate that stormwater controls for small construction were not needed based on 1) a Total Maximum Daily Load for impaired waters or 2) for non-impaired waters that do not require a TMDL, an equivalent analysis that either determined pollutant load allocations for small construction or determined that such load allocations were not necessary.

While the criteria for the Rainfall-Erosivity Waiver were built into the definition of "stormwater discharge associated with small construction activity" itself, only the broad outline of the Water Quality Waivers was included in the rule. The details of the Water Quality Waivers were expected to be included in a water quality analysis that would take place independently.

- **Low Rainfall Erosivity Waiver.** In order to qualify for the Low Rainfall Erosivity Waiver, the small construction project's rainfall erosivity factor calculation ("R" in the Revised Universal Soil Loss Equation) must be less than 5 during the period of construction activity. The "R" factor is dependent on the location, date, and duration of the project. The operator must certify to ADEQ that construction activity will occur only in a time period when the rainfall erosivity factor is less than 5. The period of construction activity begins at initial earth disturbance (clearing, grading, or excavating) and ends with final stabilization. Where vegetation will be used for final stabilization, the date of installation of a stabilization practice that will provide interim non-vegetative stabilization can be used for the end of the construction period, provided the operator commits (as a condition of waiver eligibility) to periodically inspect and properly maintain the area until the criteria for vegetative final stabilization as defined in the construction general permit have been met. If use of this interim stabilization eligibility condition is relied on to qualify for the waiver, signature of the waiver form with its certification statement would constitute acceptance of and commitment to complete the final stabilization process.

  Methods for determining the R factor for a small construction site are provided in detail on an EPA Fact Sheet (Low Rainfall Erosivity Waiver (Fact Sheet 3.1) that is currently under revision. ADEQ also intends to include a calculator in the development of the Smart NOI system. As envisioned, the calculator would easily determine the "R" factor for a specific location and time period. It would also be useful in determining the time periods during which construction activity could be waived from permit coverage. Construction operators may find that moving their construction activity by a few weeks or expediting site stabilization will allow them to be waived.

- **TMDL Waiver.** If a water is listed as impaired and construction site runoff is identified by the State as a potential source of the impairment, a water quality waiver would not be available unless a TMDL is established and approved by EPA that addresses the pollutant(s) of concern and determines that controls on stormwater discharges from small construction activity are not needed to protect water quality. TMDLs are developed in accordance with a formal methodology, public review, and approval procedures adopted by A.R.S. 49-231 et. seq. The formal TMDL process specifies the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and allocates pollutant loadings among point and nonpoint pollutant sources. All TMDLs are done outside the context of the permit or the waiver and would only become available for use for potential waivers after they are finalized. This is not to say that appropriate controls could not be required under a permit to allow discharges to occur on an impaired water prior to the TMDL, but only that the regulations do not allow a water quality waiver in such circumstances. Information on TMDLs that have been prepared is available from ADEQ with updates on the website. The "R" Factor Waiver would still be available to eligible dischargers on impaired waters.

Deadlines for Notification.
Operators must submit the NOI form or Small Construction Erosivity Waiver to ADEQ at least 2 business days prior to commencement of construction activities. Construction activity includes the initial disturbance of soils associated with clearing, grading, excavation activities, etc. ADEQ considers this to be the minimal time necessary to evaluate if a NOI is complete and accurate and will allow for screening of key issues that may need additional review and communication with the operator, such as proximity to impaired waterways. ADEQ intends for this communication to be accelerated and effective with the use of the Smart NOI system.

Operators who wish to apply for a TMDL waiver are to do so at least 32 business days prior to commencement. However, discharges from construction activities are not authorized until written approval is given by ADEQ.

ADEQ is allowing operators of large construction projects that received authorization under one of the 1998 CGPs 90 days after the effective date of this permit to submit an NOI for coverage under the 2003 CGP. If the operator is eligible to submit an NOT (e.g., the construction activities are completed and the site is finally stabilized), a new NOI is not required to be submitted. In addition, the 2003 CGP provides these existing large construction operators 90 days to update their SWPPPs as necessary to comply with the terms of this permit. These operators are required to comply with the terms of the 1998 CGP during this 90 day period. Operators of any new large construction projects (i.e., operators of activities at large construction projects that commence construction after the effective date of this permit), must submit an NOI and develop a SWPPP prior to commencement of construction activity.

ADEQ is allowing operators of small construction projects that commenced operations prior to the effective date of this permit 90 days after the effective date of this permit to submit an NOI for coverage under the 2003 CGP. In addition, the 2003 CGP provides these existing small construction operators 90 days after the effective date of this permit to develop and begin to implement a SWPPP. If construction is completed and final stabilization achieved prior to the 90th day, submittal of an NOI and development of a SWPPP is unnecessary although ADEQ expects these operators will comply with all applicable local and state erosion and sediment control requirements. Any new small construction projects (i.e., operators of activities at small construction projects that commence construction after the effective date of this permit), must submit an NOI and develop a SWPPP prior to commencement of construction activity.

If an operator at a construction site changes or if a new operator is added after an NOI has been submitted, the new operator must ensure his NOI is received by ADEQ 2 business days prior to assuming operational control over the site or beginning work on-site.

All operators that will discharge to a municipal separate storm sewer (MS4), which could be a county, city, large federal facility, university, prison, etc. must also submit a copy of their NOI to the MS4. Since regulated MS4s have responsibilities under their AZPDES permits to inspect and regulate discharges from construction sites to their systems, this notification is necessary communication with the MS4.

PART IV. Stormwater Pollution Prevention Plans (SWPPPs)

A. General Information. The SWPPP focuses on two major requirements: (1) Providing a site description that identifies sources of pollution to stormwater discharges associated with construction activity on site; and (2) identifying and implementing appropriate measures to reduce pollutants in stormwater discharges to ensure compliance with the terms and conditions of this permit. All SWPPPs must be developed in accordance with sound engineering practices and must be developed specific to the site. For coverage under this permit, the SWPPP must be prepared before commencement of construction and then updated as appropriate.

The permit also clarifies that once a definable area of the site has been finally stabilized, no further SWPPP requirements apply to that portion of the site as long as the SWPPP has been updated

accordingly to identify that portion of the site as complete.

B. Requirements for Different Types of Operators. The term "operator" may be defined as one with operational control over construction plans and specifications or one with control over the day-to-day activities of the site. Operators may also only have control over a portion of a larger project and several operators are then responsible for separate portions of the entire construction project.

1. Operators with Operational Control Over Construction Plans and Specifications.
If an operator falls within this category, he or she must ensure that the SWPPP indicates the areas of the project where operational control over project specifications, including the ability to make modifications to plans and specifications occur. The operator must ensure that all other permittees implementing portions of the SWPPP impacted by any changes made to the plan are notified of such modifications in a timely manner and ensure that the SWPPP contains the appropriate information indicating who has operational control.

2. Operators with Control Over Day-to-Day Activities.
If an operator is responsible for the day-to-day operational control of the activities at a project site necessary to ensure compliance with the SWPPP, he or she must ensure the SWPPP meets the minimum requirements of Part III of the permit. The operator must also identify those responsible for implementation of control measures required in the SWPPP, ensure the SWPPP indicates areas of the project where operational control of day-to-day activities are maintained, and identify the parties responsible for implementation of control measures identified in the plan.

3. Operators with Control Over a Portion of a Larger Project.
If an operator is responsible for only a portion of a larger construction project he or she must maintain compliance with all applicable terms and conditions of this general permit for that portion of the project. Operators have the option of developing and implementing either a comprehensive SWPPP, that covers all operators at the construction site, or an individual SWPPP, covering only an individual operator's portion of the site (provided reference is made to the other operators of the site). Operators are encouraged to develop a comprehensive SWPPP to enhance cost sharing and coordination of BMPs. If operators choose to develop individual plans, there must be coordination between the permittees to ensure stormwater discharge controls are consistent between the sites. Regardless of development of an individual or comprehensive SWPPP, operators must ensure that individual activities do not negatively impact another operator's pollution controls.

C. Pollution Prevention Plan Contents: Site and Activity Description

1. Identification of Operators. The SWPPP must identify all known operators of the project site and identify the type of operational control of the operator: operational control over construction plans and specifications; control over day-to-day activities; or control over a portion of a larger project. The SWPPP must identify who will be responsible for implementing each measure contained in the plan. It is the permittee's responsibility to provide necessary information on complying with their SWPPP and the permit to their contractors and subcontractors.

2. Site Description. The SWPPP must be based on an accurate assessment of the potential for generating and discharging pollutants from the site. Hence, the permit requires the identification of potential sources of pollution at a construction site that may reasonably be expected to impact the quality of the site's stormwater discharges. There must also be a description of the site and anticipated construction activities in the SWPPP (to provide a better understanding of site runoff characteristics). At a minimum, SWPPPs must contain the following:

- A description of the nature of the construction activity including the function of the project (e.g., low-density residential, shopping mall, highway, etc.);
- A description of the intended significant activities, presented sequentially, that disturb soil over major portions of the site (e.g., grubbing, excavation, grading);
- Estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading or other activities, including off-site borrow/fill areas. It may be preferable to separately describe portions of the site as they are disturbed at different stages of the construction process;
- Since the function of drywells is to manage stormwater discharges, their presence and location is an important part of the site's stormwater management practices. As such, the SWPPP must include a description of any drywells located at the facility that might receive discharges, and if so, the registration numbers for those drywells;
- An estimate of pre and post-construction runoff coefficients; and
- A general location map able to identify the location of the activity and the receiving waters within one mile of the activity.

3. Legible Site Map. The SWPPP must contain a legible, to-scale, site map indicating: (1) Anticipated drainage patterns and slopes after major grading activities; (2) areas of soil disturbance and areas that will not be disturbed; (3) locations of major structural and nonstructural controls identified in the plan; (4) locations of planned stabilization measures; (5) off-site locations of equipment storage, material storage, waste storage and borrow/fill areas; (6) locations of surface waters (including wetlands); (7) locations of discharge points to surface waters or MS4s; (8) locations of on-site drywells; and (9) areas where final stabilization has been accomplished and no further construction phase permit requirements apply. Site maps should also include other major features and potential pollutant sources, such as locations of impervious structures and soil storage piles.

4. Receiving Waters. The SWPPP must identify the name(s) of the nearest receiving water(s) to the construction site that may be disturbed or will receive stormwater discharges from the site. Receiving waters include, but are not limited to ephemeral and intermittent streams, dry sloughs, and arroyos, and wetlands.

5. Other Pollutant Sources. The SWPPP must provide a description of any discharge associated with any activity other than construction (including stormwater discharges from dedicated asphalt plants, concrete plants, etc.) and the location of that activity on the construction site.

6. Off-site material Storage. The SWPPP must identify off-site storage areas used solely by the project and impose appropriate BMPs to minimize discharges from those areas.

D. Pollution Prevention Plan Contents: Controls to Reduce Pollutants. The SWPPP must describe the implementation of practices that will be used to reduce the pollutants in stormwater discharges from the site and assure compliance with the terms and conditions of the permit. Stormwater controls must be developed and implemented that address erosion and sediment controls, including interim and permanent stabilization practices, structural practices, post construction stormwater management measures, and other controls to address specific construction-related pollutant sources.

The SWPPP must describe the intended sequence of major stormwater control activities and when, in relation to the construction process, they will be implemented. ADEQ recognizes that many factors can impact the actual construction schedule, so the permittee need not include specific dates (e.g. plan could say install silt fence for area "A" before rough grading, rather than put up silt fences on August 15). Good site planning and preservation of mature vegetation are imperative for controlling pollution in stormwater discharges both during and after construction activities. Properly staging major earth disturbing activities can also dramatically decrease the costs of sediment and erosion controls.

Stabilization practices are the first line of defense in preventing erosion. The SWPPP must include a description of interim and permanent stabilization practices, including a schedule of implementation. The permittee should ensure that existing vegetation is preserved wherever possible and that disturbed portions of the site are stabilized as quickly as practicable. Stabilization practices include seeding of temporary vegetation, seeding of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, preservation of trees and mature vegetative buffer strips, and other appropriate measures. Temporary stabilization can be the single most important factor in reducing erosion at construction sites.

Stabilization also involves preserving and protecting selected trees on the site prior to development. Mature trees have extensive canopy and root systems, which help to hold soil in place. Shade trees also keep soil from drying rapidly and becoming susceptible to erosion. Measures taken to protect trees can vary significantly, from simple ones such as installing tree armoring and fencing around the drip line, to more complex measures such as building retaining walls and tree wells.

***Description and Schedule*.** The SWPPP requires that specific construction dates be documented and maintained as a way for the construction operator as well as ADEQ to determine applicability and implementation status of SWPPP requirements. Important dates include when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated.

The SWPPP must include a description of structures built to divert flows from exposed soils, and store or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Structural controls may be necessary because vegetative controls cannot be employed where soil is continually disturbed and because of the lag time before vegetation becomes effective. Options for such controls include silt fences, earth dikes, drainage swales, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, sediment traps, reinforced soil retaining systems, gabions and temporary or permanent sediment basins.

Post Construction stormwater management. The SWPPP must include a description of post-construction stormwater management measures. This permit, however, addresses only the installation of these measures; not the ongoing operation and maintenance of them after cessation of construction activities and final stabilization. Permittees are responsible only for the installation and maintenance of stormwater management measures prior to final stabilization of the site. When selecting stormwater management measures, the operator should consider the amount of required maintenance and whether there will be adequate resources for maintaining them over the longer term.

Some discharges of pollutants from post-construction stormwater management structures may need to be authorized under an NPDES permit (e.g., the construction project was an industrial facility in a sector covered by the NPDES multi-sector general permit).

***Velocity Dissipation*.** Stormwater management measures installed during the construction process can control the volume and velocity of runoff, as well as reduce the quantity of pollutants discharged post-construction. Reductions in peak discharge velocity and volume can reduce pollutant loads as well as diminish physical impacts such as stream bank erosion and stream bed scour. Stormwater management measures that mitigate changes to pre-development runoff characteristics assist in protecting and maintaining the physical and biological characteristics of receiving streams and wetlands.

Placement of structural controls in flood plains should be avoided, rather they should be located on upland soils to the degree possible. The installation of structural control measures may be subject to section 404 of the CWA if they will be located in wetlands or other navigable waters (i.e., waters of the United States).

Options for stormwater management measures that should be evaluated in the development of plans include:

- On-site infiltration of precipitation;
- Flow attenuation by use of open vegetated swales and natural depressions;
- Stormwater retention/detention structures (including wet ponds); and
- Sequential systems using multiple methods.

Although not a limitation or performance standard in the permit, it is anticipated that stormwater management measures can achieve removal of at least 80% of total suspended solids at many sites. A number of stormwater management measures can be used to achieve this level of control, including:

- Properly designed and installed wet ponds;
- Infiltration trenches and basins;
- Sand filter systems;
- Manmade stormwater wetlands; and
- Multiple pond systems.

Pollutant removal efficiencies of various management measures can be estimated from a number of sources, including "Stormwater Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices," U.S. EPA, 1992, and "A Current Assessment of Urban Best Management Practices" prepared for U.S. EPA by Metropolitan Washington Council of Governments, March 1992. Additional information on BMPs is available from EPA in an on-line document entitled, "National Menu of Best Management Practices for Stormwater Phase II" and found on the Internet at www.epa.gov/npdes/menuofbmps/menu.htm and from an on-line database entitled, "National Stormwater Best Management Practices (BMP) Database" sponsored by EPA and the American Society of Civil Engineers (ASCE) and available on the Internet at www.bmpdatabase.org.

Other controls to be addressed in SWPPPs for construction activities are for compliance with the requirement that solid materials, including building material wastes, not be discharged at the site except as authorized by a section 404 permit.

The SWPPP must also describe measures to minimize vehicular tracking of soil off-site and the generation of dust. Dust and dirt-tracking can be minimized by measures such as providing gravel or paving at entrance/ exit drive paths, parking areas and unpaved transit ways on the site carrying significant amounts of traffic (i.e., more than 25 vehicles per day); providing entrance wash racks or stations for trucks; and performing street sweeping. Off-site accumulations of sediment must be regularly removed to minimize impacts. In addition, the SWPPP must clearly show compliance with applicable state or local sanitary sewer, septic system and waste disposal regulations to the extent they apply to the permitted activity.

The SWPPP must also contain a description of practices to reduce pollutants from construction-related materials which are stored on site, including a description of said construction materials (with updates as appropriate). The plan should include a description of pollutant sources from areas untouched by construction and a description of controls and measures which will be implemented in those areas.

The SWPPP must also contain a description of pollutant sources from areas other than construction (including stormwater discharges from dedicated asphalt plants and dedicated concrete plants), and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

***Erosion & Sediment controls*.** Erosion and sediment controls include both stabilization practices and structural practices. A construction site's erosion and sediment controls should be designed with the objective to retain sediment on site. Control measures must be properly selected and installed in accordance with sound engineering practices and manufacturers specifications.

***Good Housekeeping*.** Litter, construction debris, and construction chemicals must be prevented from entering a receiving water.

***Stabilization Practices*.** It is imperative that stabilization be employed as soon as possible in critical areas. The CGP requires that, except in three situations, stabilization measures must be instituted on disturbed areas as soon as practicable, but no more than 14 days after construction activity has temporarily or permanently ceased on any portion of the site. The three exceptions to this requirement are the following:

- When construction activities will resume on a portion of the site within 14 days from suspension of previous construction activities;
- The initiation of stabilization measures is precluded by snow cover or frozen ground, in which case they must be initiated as soon as practicable; and
- In arid areas (areas with an average annual rainfall of 0 to 10 inches) and semi-arid areas (10 to 20 inches) when the initiation of vegetative stabilization measures is precluded by seasonal arid conditions (i.e, this does not apply during the wet season, monsoon, etc, in such areas) and areas experiencing droughts . For the last case, stabilization measures must be initiated as soon as precipitation becomes likely.

Sediment Basins. For sites with more than 10 disturbed acres at a time, all of which are served by a common drainage location, a sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures (such as suitably-sized dry wells or infiltration structures), must be provided where practicable until final stabilization of the site has been accomplished. In lieu of the default 3,600 cubic feet/acre, the permittee can calculate the basin size based on the expected runoff volume from the local two-year, 24-hour storm event and local runoff coefficient. Flows from off-site or on-site areas that are undisturbed or have undergone final stabilization may be diverted around both the sediment basin and the disturbed area. These diverted flows can be ignored when designing the sediment basin.

For the drainage locations which serve more than 10 disturbed acres at a time and where a sediment basin designed according to the above guidelines is not feasible, smaller sediment basins or traps should be used. At a minimum, silt fences, vegetative buffer strips or equivalent sediment controls are required for all down-slope and appropriate mid-slope boundaries of the construction area. Diversion structures should be used on upland boundaries of disturbed areas to prevent run-on from impacting disturbed areas. ADEQ does not intend to imply that silt fences or vegetative buffer strips on down-slope boundaries are the only BMPs that need to be used to protect water quality. ADEQ encourages the use of a combination of sediment and erosion control measures in order to achieve maximum pollutant removal.

For drainage locations serving 10 or less acres, smaller sediment basins or sediment traps should be used and, at a minimum, silt fences or equivalent sediment controls are required for all down slope and appropriate mid-slope boundaries of the construction area. Alternatively, the permittee may install a sediment basin providing storage for 3,600 cubic feet (or the alternative calculated volume) of storage per acre drained. Diversion structures should be installed on upland boundaries of disturbed areas to prevent run-on. ADEQ does not intend to imply that silt fences or vegetative buffer strips on down-slope boundaries are the only BMPs that need to be used to protect water quality. ADEQ encourages the use of a combination of sediment and erosion control measures in order to achieve maximum

pollutant removal.

Velocity Dissipation Devices. Increased discharge velocities can greatly accelerate erosion near the outlet of structural measures. To mitigate these effects, velocity dissipation devices should be placed at discharge points and along the length of a runoff conveyance, as necessary, to provide a non-erosive flow. Velocity dissipation devices help protect a water body's natural, pre-construction physical and biological uses and characteristics (e.g., hydrologic conditions such as the hydro period and hydrodynamics).

Post Construction stormwater management. Land development can significantly increase stormwater runoff volume and peak velocity if appropriate stormwater management measures are not implemented. In addition, post-development stormwater discharges will typically contain higher levels of pollutants, including total suspended solids (TSS), heavy metals, nutrients and high oxygen-demand components.

The evaluation of whether the pollutant loadings and the hydrologic conditions (the volume of discharge) of flows exceed pre-development levels can be based on hydrologic models which consider conditions such as the natural vegetation endemic to the area.

Other Controls. Other controls include preventing the discharge of solid material, minimizing off-site tracking of sediments, pollutant and spill prevention in storage areas, controls from other related activities, and stabilization of culvert locations.

E. Non-Stormwater Discharge Management. The SWPPP must identify appropriate pollution prevention measures for each of the eligible non-stormwater components of the discharge covered by this permit when combined with stormwater discharges associated with construction activity.

F. Maintenance of Controls. Erosion and sediment controls can become ineffective if they are damaged or not properly maintained. The SWPPP requires all erosion and sediment control measures to be maintained in effective operating condition. If site inspections identify BMPs that are not operating effectively, maintenance must be performed before the next anticipated storm event. If maintenance before the next anticipated storm event is impracticable, maintenance must be completed as soon as practicable. The permit also requires that the operator remove sediment from sediment traps or sedimentation ponds when design capacity of that device has been reduced by 50 percent or more.

G. Permit Related Records. A copy of the CGP, the signed and certified NOI submitted to ADEQ, and a copy of the document from ADEQ indicating the permittee's authorization number must be included in the SWPPP. This condition in the permit is intended to stress the importance of these documents for operators to understanding permit responsibilities. The SWPPP must also contain a copy of any other agreements or special conditions that potentially affect stormwater and apply to site construction activities due to interaction with other state, local or federal agencies. Where these exist, it is important that an inspector may be aware of and view these additional provisions

H. Applicable Local Programs. Many municipalities and counties have developed sediment and erosion control requirements for construction activities. A significant number have also developed stormwater management requirements. The CGP requires that SWPPPs for sites that discharge stormwater associated with construction activities be consistent with procedures and requirements of local sediment and erosion control plans and stormwater management plans. The construction site's SWPPP may incorporate portions of a local program's pollution prevention plan if these requirements are at least as strict as the CGP. If your construction site is located in an area covered by such a local program, then your compliance with various aspects of the local program would constitute compliance with these aspects of the CGP.

I. Inspections.

Routine Inspection Schedule. Permittees must inspect designated areas on the site regularly. For purposes of this part, ADEQ defines that to be either (1) at least once 7 calendar days or (2) at least once every 14 calendar days, and within 24 hours after any storm event of 0.5 inches or greater. ADEQ also recommends that permittees perform a "walk through" inspection of the construction site before anticipated storm events (or series of events such as intermittent showers over a period of days) that could potentially yield a significant amount of runoff. Depending on local rainfall patterns, it is possible that either more or less inspections would be required under the once per week option. The permittee may choose one of the two inspection frequency scenarios. In exchange for committing to more frequent inspections, the operator could plan and budget for one inspection per week and would not have to deal with uncertainties associated with an unknown number of additional inspections triggered by rain events and the need to have inspectors on standby. This flexibility would be especially valuable for unmanned locations. Proper operation and maintenance of stormwater BMPs is independently required by the permit, so either inspection schedule is expected to provide adequate environmental protection.

Reduced Inspection Frequency. For sites that have undergone stabilization (temporary or final) or in the dry season at arid (average annual rainfall of 0 to 10 inches) or semi-arid (annual rainfall of 10 to 20 inches) locations, inspections must be conducted at least once a month and before and after significant rainfall events.

Inspectors. Inspections must be performed by qualified personnel; either the operator's own personnel or consultants hired to perform the inspections. The inspectors must be knowledgeable and possess the skills to assess conditions at the construction site that could impact stormwater quality and assess the effectiveness of sedimentation and erosion control measure chosen to control the quality of the site's stormwater discharges.

Scope of Inspections. Visual inspections must comprise, at a minimum:

- Disturbed areas;
- Areas used for storage of construction equipment and materials exposed to precipitation. Since storage areas may change frequently, the inspector should routinely ensure that storage areas match those designated in the SWPPP and are not a potential for pollutant discharge;
- Sediment and erosion control measures;
- Locations where vehicles enter or exit the site; and
- The inspector is also to look for, identify, and document any non-stormwater discharges and ensure they are allowable discharges being managed in accordance with the permit.

Where discharge points are accessible, they must be inspected to ascertain whether erosion control measures are effective in preventing impacts to receiving waters. This can be done by inspecting the waters for evidence of erosion or sediment introduction. If discharge points are inaccessible, the permit requires that nearby downstream locations be inspected, if practicable.

Inspectors must determine whether erosion control measures are effective in preventing impacts to the receiving water and look for evidence of or the potential for pollutants entering the drainage system.

Compliance Evaluation Report. Once an inspection has been performed, a report must be retained with the SWPPP for up to three years after the site has been finally stabilized. The report should include:

- Components and scope of the inspection;
- Names and qualifications of personnel conducting the inspection;
- Dates of the inspection; weather information;
- Observations relating to the implementation of the SWPPP, and corrective actions needed
- Actions taken; and
- Incidents of non-compliance.

Major observations made during the inspection should include:

- Location(s) of discharges of sediment or other pollutants from the site;
- Location(s) of BMPs that need to be maintained;
- Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location; and
- Location(s) where additional BMPs are needed that dot exist at the time of the inspection.

A record of actions taken as a result of the inspection must be maintained with the SWPPP for at least three years from the date of permit expiration or termination. If no incidents of non-compliance were found, the report shall contain a certification that the facility is in compliance with the SWPPP and this permit. Finally, the report must be signed in accordance with the signatory requirements in Part VII, Section K of the permit.

J. Maintaining an Updated SWPPP. If an inspection reveals inadequacies in the site description or pollution prevention measures identified in the SWPPP, it must be revised. All necessary modifications to the SWPPP must be made within fifteen calendar days following the inspection.

The SWPPP must also be revised within 15 calendar days whenever there is a change in design, construction method, operation, maintenance procedure, etc., that may cause a significant effect on the discharge of pollutants to surface waters or MS4s. The plan must also be amended if inspections indicate the SWPPP is ineffective in eliminating or significantly reducing pollutants in the discharges from the construction site. In addition, the plan must be updated to identify any new operator who will implement a portion of the SWPPP.

K. Signature, Plan Review, and Making Plans Available. The SWPPP must be signed in accordance with the signatory requirements in the Standard Permit Conditions section of the permit (Part VII.K) and retained on-site at the construction site covered by this permit.

A notice about the permit and SWPPP must be conspicuously posted near the main entrance of the site. If displaying near the main entrance is infeasible, the notice can be posted in a local public building such as the town hall or public library. For linear projects, the notice must be posted at a publicly accessible location near the active part of the construction project (e.g., where a pipeline project crosses a public road). The permit notice must include the following information:

- The AZPDES authorization number for the project, or a copy of the completed Notice of Intent as submitted to ADEQ if one has not yet been assigned;
- The name and phone number of a local contact;
- A brief project description; and
- The location of the SWPPP if not kept on site.

The SWPPP is considered a public document accessible under this permit. However, the permit does not require that the general public have access to the construction site nor does it require that copies of the plan be directly mailed to members of the public. However, upon

receipt of a written request from the public, ADEQ will require a copy of the SWPPP to be submitted and made available for public access through ADEQ. ADEQ considers this approach will balance the public's right for information on permitted projects potentially impacting their water bodies and the site operator's need for safe and unimpeded work conditions.

Permittees must make SWPPPs available, upon request, to ADEQ, EPA, and other State, Tribal, MS4s, or local agencies approving sediment and erosion plans, grading plans or stormwater management plans. Also, the operator must make SWPPPs available to ADEQ or EPA for review and copying during any on-site inspection.

L. Deficiencies in the SWPPP. ADEQ may notify the permittee at any time that his or her plan does not meet one or more of the permit requirements. The notification will identify which requirements are not being met and which elements of the SWPPP require modification. Within 15 business days of receipt of notification from ADEQ (or as otherwise requested by ADEQ), the required changes to the plan must be made and a certification submitted that the changes have, in fact, been made and implemented. The department may request to view the revised SWPPP.

PART V. Special Conditions

A. Hazardous Substances or Oil. Discharge of a hazardous substance or oil caused by a spill (e.g., a spill of oil into a separate storm sewer) are not authorized by this permit. The construction site must have the capacity to control, contain, and remove such spills if they are to occur. Spills in excess of reportable quantities, as described in Part 4.3, must still be reported as required under 40 CFR 110. Also Section 311 of the CWA and certain provisions of Sections 301 and 402 of the CWA are also applicable.

B. Releases in Excess of Reportable Quantities. The construction general permit requires the operator to prevent the discharge of hazardous substances or oil from a site in accordance with the SWPPP. This section applies to discharges at the site which may have a potential to affect the quality of stormwater discharging or to be discharged from the site. A spill to soil can be significant even if it is not presently raining. Within 14 calendar days of knowledge of the release, the SWPPP must be modified to include the date and description of the release, the circumstances leading to the release, responses to be employed for such releases, and measures to prevent the reoccurrence of such releases.

C. Spills. The permit does not allow the discharge of any hazardous or nonhazardous spilled materials.

D. Non-Attainment of Water Quality Standards After Authorization. If the Department notifies a permittee that a discharge is or may cause or contribute to non-attainment of WQ standards, the permittee must take one of 2 actions: 1) Modify the SWPPP with supplemental BMPs that will be protective, or 2) apply for an individual permit. ADEQ does, however, expect operators to be proactive about following up on any discharges that may contribute to water quality standard exceedences and not rely on ADEQ notification.

E. Continuation of the Expired General Permit. The permit specifies procedures for continued coverage under a general permit if the permit expires prior to a replacement permit being issued. In short, the expired permit would remain in full force and effect. Any permittee granted coverage prior to the permit's expiration date will automatically remain covered by the continued permit until the earliest of:

- The permit being reissued or replaced;
- The permittee terminating coverage by submitting an NOT;

- Issuance of an individual permit for the permittee's discharges; or
- A formal decision by ADEQ not to reissue the general permit, at which time the permittee must seek coverage under an alternative general permit or an individual permit. However, should the permit expire prior to a replacement permit being issued, the existing permit will only cover those operators that submitted a complete and accurate NOI and met all the eligibility requirements prior to the expiration date of the permit. New construction projects requiring permit coverage after the expiration date of this permit are not eligible for coverage until a replacement permit is issued.

Part VI. Retention of Records

The permit requires that the operator must retain all records and reports required by this permit, including SWPPPs and information used to complete the NOI, for at least three years from the date of final stabilization. This period may be extended by request of ADEQ.

A copy of the SWPPP must be kept at the construction site from the date of project initiation to the date of final stabilization. Permittees with day-to-day operational control over the plan's implementation must keep a copy of the plan readily available whenever they are on site (a central location accessible by all on-site operators is sufficient). If an on-site location is unavailable to store the SWPPP when no personnel are present, notice of the plan's location must be conspicuously posted at the construction site. A copy of the SWPPP must be readily available to authorized inspectors during normal business hours.

Part VII. Standard Permit Conditions

Although some of these conditions may not appear directly related to the CGP, the Federal regulations require all AZPDES permits to contain the standard conditions specified at 40 CFR 122.41. This section of the permit describes those conditions.

A. **Duty To Comply.** The permittee must comply with all conditions of this permit. An operator not fulfilling his or her obligations, as agreed upon by signing the NOI, is considered in violation of state statutes, as well as the Clean Water Act, and is grounds for injunctive relief, substantial monetary penalties, incarceration, changes or terminations to the permit, or denial of permit renewal.

B. **Duty to Reapply.** If the permittee, after expiration of its permit, desires to continue its activities, it must reapply for and obtain a new permit. For general permit coverage, this requires the permittee to comply with the terms of the reissued permit regarding follow-on permit coverage.

C. **Need to Halt or Reduce Activity Not a Defense.** The permittee facing enforcement action may not use as a defense the reasoning that compliance could only be achieved by halting or reducing the permitted activity.

D. **Duty to Mitigate.** The permittee is required to take all reasonable steps to prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

E. **Proper Operation and Maintenance.** The permittee must properly operate and maintain all equipment and treatment systems used by the permittee for compliance with the terms of the permit. This includes sediment and erosion controls installed at the site used to achieve compliance with the terms of the permit and the SWPPP. The permittee must provide appropriate laboratory controls and quality assurance procedures as necessary. Backup systems are required when needed to ensure compliance.

F. Permit Actions. The permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation, reissuance, termination, or a notification of planned changes or anticipated noncompliance does not halt any permit condition.

G. Property Rights. An operator of a construction activity does not convey his or her property rights or privileges through issuance of this permit or coverage of activity under this permit. Injury to private property or invasion of personal rights are also not authorized under this permit nor any infringement of Federal, State, or local laws or regulations.

H. Duty to Provide Information. The permittee must transmit any information needed to determine compliance with the permit or to modify the permit.

I. Inspection and Entry. The permittee must, upon presentation of valid credentials by ADEQ or its representative, allow entry into the premises where the regulated activity and/or records are present. ADEQ must have access to view and to be able to make copies of any required records, inspect facilities, practices, operations, and equipment, and sample or monitor at reasonable times.

J. Monitoring and Records. Any samples required to be taken must be representative of the monitored activity. Records must be retained for 3 years (5 years for sludge activities) subject to extension by ADEQ. Monitoring records must identify the sampling dates and personnel, the sample location and time, and the analytical techniques used and corresponding results. Wastewater and sludge measurements must be conducted in accordance with 40 CFR Parts 136 or 503 or other specified procedures. Falsification of results is a violation.

K. Signatory Requirements. Applications, reports, NOIs, NOTs, or other information submitted to ADEQ must be signed and certified by a responsible officer, a general partner or proprietor of a partnership, or a principal executive officer or ranking elected official for a municipality, State, Federal, or other public agency. Knowingly making false statement, representations, or certifications is subject to penalties. Other than for applications and NOIs, these reports may be signed by a duly authorized representative. A person is considered a duly authorized representative only if the authorization is made in writing by such person and submitted to ADEQ. A duly authorized representative may be either a named individual or any individual occupying a named position. The duly authorized representative is not the same as an operator, but the legally bound representative of the operator.

L. Reporting Requirement. The permittee must report planned changes, anticipated noncompliance, and monitoring (for those required to monitor. This is limited to those that discharge to impaired or unique waters) The permittee must orally report to ADEQ any noncompliance which may endanger health or the environment within 24 hours. A written report must be submitted to followup within 5 days. Other noncompliance with the permit must also be reported. If the permittee becomes aware that there was incorrect or inadequate information on the NOI that was submitted, he must contact ADEQ and report that information.

M. Bypass. The permittee is not allowed to bypass treatment facilities or on-site BMPs except in certain specified emergencies.

N. Upset. An upset can be used as an affirmative defense in actions brought to the permittee for noncompliance. The permittee (who has the burden of proof) must have operational logs or other evidence that shows (1) when the upset occurred and its cause, (2) that the facility was being operated properly, (3) proper notification was made, and (4) remedial measures were taken.

O. Reopener. The Department can choose to reopen and modify this permit in the event of new regulatory requirements.

P. Other Environmental Laws. Compliance with this permit does not give permission to violate other environmental rules or statutes.

Q. State or Tribal Law. Compliance with this permit does not give permission to violate other laws.

R. Severability. If any part of this permit is determined to be invalid in a subsequent administrative or legal process, the remainder of the permit will not be affected.

S. Requiring Coverage under an Individual Permit or an Alternative General Permit. Based upon a number of different situations (e.g., applicable numeric effluent limitations resulting from a TMDL, or a determination that the operator has the potential to cause or contribute to a water quality standard exceedance), ADEQ may determine that coverage under an individual permit is necessary. If a permittee is currently discharging under this general permit and ADEQ determines that individual coverage is required, written notification of this required change in permit coverage, including reasoning for this decision, an application form, and a deadline for filing the application, will be provided to the permittee.

T. Request for an Individual Permit. An operator may apply for an individual permit rather than apply for coverage under this general permit. An individual application must be submitted for coverage under such a permit with reasoning supporting the request. If such reasoning is considered adequate by ADEQ, the request will be granted and an individual permit issued. If an individual permit or alternative AZPDES permit is issued to the permittee currently covered under this general permit, coverage under the general permit is terminated on the effective date of the new permit. Alternatively, if a permittee, currently covered under the general permit, seeks coverage under an individual or alternative NPDES permit and is denied, coverage under the general permit is terminated on the date of such denial, unless otherwise specified by ADEQ.

Part VIII. Penalties for Violation of Permit Conditions

This part advises the regulated community of the appropriate legal authorities and potential penalties for non-compliance with this permit.

Part IX. Definitions

The permit contains definitions of statutory, regulatory and other terms important for understanding the permit and its requirements. Several definitions were added to this permit that were not included in the 1998 permit. In addition, several terms that were defined in the body of the 1998 permit were moved to the definition section. New terms defined in this permit include: large construction activity, small construction activity, wetland, drought, significant contributor of pollutants, 'received' (for purposes of NOI and other documents submitted to the Department under this permit) and seasonal arid. Definitions of these terms were added for clarity of permit conditions.

Part X. Acronyms

The permit contains a list of acronyms found in the permit which aids in the understanding of the permit and its requirements.

FREQUENTLY ASKED QUESTIONS

The following are answers to some commonly asked questions on the construction stormwater permitting program. They are intended to help construction operators understand the permit. Be aware these answers are fairly broad and may not take into account all scenarios possible at construction sites.

WHAT IS THE GOAL OF THIS PERMIT?

The goal is to protect the quality and beneficial uses of Arizona's surface water resources from pollution in stormwater runoff from construction activities. To achieve this, the permit requires operators to plan and implement appropriate pollution prevention and control practices for stormwater runoff during the construction period. These Best Management Practices (BMPs) are aimed primarily at controlling erosion and sediment transport, but would also include controls, including good housekeeping practices, aimed at other pollutants such as construction chemicals and solid waste (e.g., litter). As used in this permit, the terms "Construction and Construction-related activities" include all clearing, grading, excavation, and stockpiling activities that will result in the disturbance of 1 or more acres of land area.

WHAT TYPES OF CONSTRUCTION ACTIVITIES MAY NEED A STORMWATER PERMIT?

Any construction activity that is, or is part of, a "common plan" of development or sale that will disturb 1 or more acres and has the potential to have a discharge of stormwater to a water of the United States must either have a permit OR have qualified for a waiver. These regulated discharges are broken into two categories: "Large" and "Small". A large construction activity is one that will disturb, or is part of a "common plan" that will cumulatively disturb, 5 or more acres. A small construction activity is one that will disturb, or is part of a "common plan" that will cumulatively disturb, 1 or more acres.

Construction and construction-related activities refers to the actual earth disturbing construction activities and those activities supporting the construction project such as construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck washout, fueling), measures used to control the quality for stormwater associated with construction activity, or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants). It does not refer to construction activities unrelated to earth disturbing activities such as interior remodeling, completion of interiors of structures, etc. "Construction" does not include routine earth disturbing activities that are part of the normal day-to-day operation of a completed facility (e.g., daily cover for landfills, maintenance of gravel roads or parking areas, landscape maintenance, etc.) nor activities under a State or Federal reclamation program to return an abandoned facility property to an agricultural or open land use (as opposed to demolition of something in order to build something new).

ARE THERE SITUATIONS WHERE A PERMIT IS NOT NEEDED?

If all of the stormwater from the construction activity is captured on-site and allowed to evaporate, soak into the ground on-site, or is used for irrigation, you do not need a permit. Under the Clean Water Act, it is illegal to have a point source discharge of pollutants to a water of the United States that is not authorized by a permit. If there is a potential for a discharge, you need to apply for a permit. Therefore, the best management practices that you use to keep the stormwater on your site must be effective under any size storm.

IF A CONSTRUCTION ACTIVITY DOES NOT ADVERSELY IMPACT WATER QUALITY IS COVERAGE UNDER THE CONSTRUCTION GENERAL PERMIT STILL NECESSARY?

Waivers are possible only for discharges of stormwater associated with SMALL construction activity (i.e., construction disturbing less than 5 acres). These waivers are authorized by federal regulation at 40 CFR 122.26(b)(15)(i)(A) & (B) and are explained in this permit. Waivers are not available for any construction activity disturbing 5 acres or greater, or less than 5 acres if part of a common plan of development or sale (or if designated for permit coverage by ADEQ).

WITH ALL THE PEOPLE INVOLVED IN A CONSTRUCTION PROJECT, HOW DO I KNOW IF I AM THE ONE THAT NEEDS TO APPLY FOR THE PERMIT?

You must apply if you meet either of the two parts of the definitions of "Operator." This means you should apply for permit coverage if you have operational control over either the construction plans and specifications, including the ability to make modifications to those plans and specifications (e.g., owner or developer of project), or you have day-to-day operational control of those activities at a project which are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other permit conditions (e.g., general contractor). However, where your activity is part of a larger common plan of development or sale, you are only responsible for the portions of the project for which you meet the definition of "operator."

There may be more than one party at a site performing the tasks relating to "operational control." Depending on the site and the relationship between the parties (e.g., owner, developer, general contractor), there can either be a single party acting as site operator and consequently be responsible for obtaining permit coverage, or there can be two or more operators with all needing permit coverage. Exactly who is considered an operator is largely controlled by how the "owner" of the project chooses to structure their contracts with the "contractors" hired to design and/or build the project. The following are three general operator scenarios (variations on any of the three are possible, especially as the number of "owners" and contractors increases):

- **!** "Owner" as sole permittee. The property owner designs the structures for the site, develops and implements the SWPPP, and serves as general contractor (or has an on-site representative with full authority to direct day-to-day operations). The "Owner" can be the only party that needs a permit, in which case everyone else on the site may be considered subcontractors and not need permit coverage.

- **!** "Contractor" as sole permittee. The property owner hires a construction company to design the project, prepare the SWPPP, and supervise implementation of the plan and compliance with the permit (e.g., a "turnkey" project). Here, the contractor would be the only party needing a permit. It is under this scenario that an individual having a personal residence built for his own use (e.g., not those to be sold for profit or used as rental property) would not be considered an operator. ADEQ believes that the general contractor, being a professional in the building industry, should be the entity rather than the individual who is better equipped to meet the requirements of both applying for permit coverage and developing and properly implementing a SWPPP. However, individuals would meet the definition of "operator" and require permit coverage in instances where they perform general contracting duties for construction of their personal residences.

- **!** Owner and contractor as co-permittees. The owner retains control over any changes to site plans, SWPPPs, or stormwater conveyance or control designs; but the contractor is responsible for overseeing actual earth disturbing activities and daily implementation of SWPPP and other permit conditions. In this case, both parties may need coverage.

However, you are probably not an operator and subsequently do not need permit coverage if:

- **!** You are a subcontractor hired by, and under the supervision of, the owner or a general contractor (i.e., if the contractor directs your activities on-site, you probably are not an operator); or

- **!** Your activities on site result in earth disturbance and you are not legally a subcontractor, but a SWPPP specifically identifies someone other than you (or your subcontractor) as the party having operational control to address the impacts your activities may have on stormwater quality (i.e., another operator has assumed responsibility for the impacts of your construction activities). This particular provision will apply to most utility service line installations.

In addition, for purposes of this permit and determining who is an operator, "owner" refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g., having a house built by a residential homebuilder).

MY PROJECT WILL DISTURB LESS THAN 1 ACRE, BUT IT MAY BE PART OF A "LARGER COMMON PLAN OF DEVELOPMENT OR SALE." HOW CAN I TELL AND WHAT MUST I DO?

In many cases, a common plan of development or sale consists of many small construction projects. For example, an original common plan of development for a residential subdivision might lay out the streets, house lots, and areas for parks, schools and commercial development that the developer plans to build or sell to others for development. All these areas would remain part of the common plan of development or sale until the intended construction occurs.

If your smaller project is part of a larger common plan of development or sale that collectively will disturb 1 or more acres (e.g., you are building on 6 half-acre residential lots in a 10-acre development or are putting in a fast food restaurant on a 3/4 acre pad that is part of a 20 acre retail center) you need permit coverage. The "common plan" in a common plan of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. You must still meet the definition of operator in order to be required to get permit coverage, regardless of the acreage you personally disturb. As a subcontractor, it is unlikely you would need a permit.

However, where only a small portion of the original common plan of development remains undeveloped and there has been a period of time where there is no ongoing construction activities (i.e., all areas are either undisturbed or have been finally stabilized), you may re-evaluate your individual project based on the acreage remaining from the original "common plan." If less than 5 but more than 1 acre remains to build out the original "common plan" a permit is still required, but you can treat your project as part of a "small" construction activity and may be eligible for the waivers available for small construction activities (e.g., one of six lots totaling 2 acres in a 50 acre subdivision can be treated as part of a 2 acre rather than 50 acre "common plan"). If less than 1 acre remains of the original common plan, your individual project may be treated as part of a less than 1 acre development and no permit would be required.

WHEN CAN YOU CONSIDER FUTURE CONSTRUCTION ON A PROPERTY TO BE PART OF A SEPARATE PLAN OF DEVELOPMENT OR SALE?

After the initial "common plan" construction activity is completed for a particular parcel, any subsequent development or redevelopment of that parcel would be regarded as a new plan of development. For example, after a house is built and occupied, any future construction on that lot (e.g., reconstructing after fire, adding a pool or parking area for a boat, etc.), would stand alone as a new "common plan" for purposes of calculating acreage disturbed to determine if a permit was required. This would also apply to similar situations at an industrial facility, such as adding new buildings, a pipeline, new wastewater treatment facility, etc. that was not part of the original plan.

WHAT IF THE EXTENT OF THE COMMON PLAN OF DEVELOPMENT OR SALE IS CONTINGENT ON FUTURE ACTIVITIES?

ADEQ recognizes that there are situations where you will not know up front exactly how many acres will be disturbed, or whether some activities will even occur with certainty. If you are not sure exactly how many acres will be disturbed, you should make the best estimate possible and may wish to overestimate to ensure you do not run into the situation where you should have a permit, but don't. For example, if you originally estimated less that 5 acres would actually be disturbed and took advantage of the "R"

Factor waiver, but you actually disturbed 5.5 acres, you would lose your waiver and would have to go through the permit process mid-stream. This could result in delays in obtaining permit authorization and costs associated with contract changes to implement permit requirements - in addition to being liable for any unpermitted discharges.

If you have a long range master plan of development where some portions of the master plan are a conceptual rather than a specific plan of future development and the future construction activities would, if they occur at all, happen over an extended time period, you may consider the "conceptional" phases of development to be separate "common plans" provided the "conceptual phase" has not been funded and periods of construction for the physically interconnected phases will not overlap. For example, a university or an airport may have a long-range development concept for their property, with future development based largely on future needs and availability of funding. A school district could buy more land than needed for a high school with an indefinite plan to add more classrooms and a sports facility some day. An oil and gas exploration and production company could have a broad plan to develop wells within a lease or production area, but decisions on how many wells would be drilled within what time frame and which wells would be tied to a pipeline would be largely driven by current market conditions and which, if any, wells proved to be commercially viable.

WHAT IF THE "COMMON PLAN OF DEVELOPMENT OR SALE" ACTUALLY CONSISTS OF NON-CONTIGUOUS SEPARATE PROJECTS?

There are several situations where discrete projects that could conceivably be considered part of a larger "common plan" can actually be treated as separate projects for the purposes of permitting.

1. A public body (e.g., a municipality, State, Tribe, or Federal Agency) need not consider all their construction projects within their entire jurisdiction to be part of an overall "common plan." For example, construction of roads or buildings in different parts of a state, city, military base, university campus, etc. can be considered as separate "common plans." Only the interconnected parts of single project would be considered to be a "common plan" (e.g., a building and its associated parking lot and driveways, airport runway and associated taxiways, a building complex, etc.).

2. Where discrete construction projects within a larger common plan of development or sale are located at least 1/4 mile apart and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed. For example, two oil and gas well pads separated by 1/4 mile could be treated as separate "common plans." However, if the same two well pads and an interconnecting access road were all under construction at the same time, they would need be considered part of a single "common plan" for permitting purposes. If a utility company was constructing new trunk lines off an existing transmission line to serve separate residential subdivisions located more than 1/4 mile apart, the two trunk line projects could be considered to be separate projects.

WHAT DO YOU NEED TO DO TO APPLY FOR PERMIT COVERAGE?

First - you will need a copy of this permit language - you will need it to determine if you are eligible for the permit; what must be included in your pollution prevention plan, and what you need to do in order to comply with the permit.

Second - you will need to prepare your Stormwater Pollution Prevention Plan. You will also need to include a copy of the permit language and documentation on your eligibility determination(s) in your Plan.

Third - you will need to fill out the NOI form and ensure that it is received by ADEQ at least 2 business days before you start construction. If online entry of NOI information becomes available during the life of

the permit, you will be able to use that option.

WHAT ARE MY OPTIONS FOR MEETING THE "FINAL STABILIZATION" CRITERIA?

In most cases, you can terminate permit coverage as soon as the portion(s) of the project for which you are an operator is finally stabilized. A definition of "Final Stabilization" is in the permit and is required only of areas that are not otherwise covered by some sort of structure. For the purpose of these discussions, "structure" is not only used in the more traditional sense of "buildings," but to also refer to other things built on the ground whose intended purpose would require it to remain in a non-vegetated condition after construction has ended. Examples of "structures" include: buildings, parking lots, roads, gravel equipment pads, sidewalks, runways, etc. All other disturbed areas must be finally stabilized by either vegetative or non-vegetative practices, except disturbed areas on lands that will be returned to an agricultural use such as cropland, rangeland, or silviculture need only be returned to the preexisting agricultural use condition (e.g., tilled land, grass rangeland, agricultural buffer stip, etc.) and where a residential homeowner has decided to install their lawn themselves, only temporary stabilization is required. Perennial vegetation could include grasses, ground covers, trees, shrubs, etc. Vegetative final stabilization only requires getting to 70% of the "natural" vegetative cover in that part of the country. If the natural cover is only 50%, you only have to get back to 35% cover (70% of 50%). Non-vegetative stabilization could include rip-rap, gravel, gabions, etc. Impervious cover such as concrete or asphalt should be avoided as a final stabilization technique. Semi-permanent low or no maintenance erosion control practices combined with seeds that would take hold the next growing season (e.g., properly secured seed impregnated erosion control mats, etc.) could also be used as "final stabilization.

WHAT IF THE OPERATOR(S) CHANGES BEFORE THE PROJECT IS COMPLETED?

If operational control changes, the old operator submits a Notice of Termination (NOT) and the new operator submits a Notice of Intent before taking over operational control.

WHAT IF EARTH DISTURBANCE IS A NORMAL PART OF THE POST-CONSTRUCTION USE OF THE SITE?

The earth disturbing activity has to be part of a project to build a structure (e.g., building, road, pad, pipeline, transmission line, etc.) or demolish an existing structure in order to build a new one on a piece of land in order to trigger the need for a permit for the discharge of stormwater associated with construction activity. Earth disturbance that is a normal part of the long-term use or maintenance of the property is not covered by the construction general permit. For example, re-grading a dirt road or cleaning out a roadside drainage ditch to maintain its "as built" state is road maintenance and not construction. Restoring the original well pad in order to work over an existing oil or gas well is operation of a well and not construction. Re-grading and re-graveling a gravel parking lot or equipment pad is site maintenance and not construction. Reworking planters that are part of the landscaping at a building is landscape maintenance and not construction. Applying daily cover at a landfill is simply part of operating a landfill and not construction. Cleaning out a drainage ditch to restore its original grade and capacity is ditch maintenance and not construction.

HOW MANY NOTICES OF INTENT (NOIs) MUST I SUBMIT?

You only need to submit one NOI to cover all activities on any one common plan of development or sale. The site map you develop for the stormwater pollution prevention plan identifies which parts of the overall project are under your control. For example, if you are a homebuilder in a residential development, you need submit only one NOI to cover all your lots, even if they are on opposite sides of the development.

DO I HAVE FLEXIBILITY IN PREPARING THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SELECTING BEST MANAGEMENT PRACTICES (BMPs) FOR MY SITE?

Stormwater pollution prevention plan requirements were designed to allow flexibility to develop the

needed stormwater controls based on the specifics of the site. Some of the factors you might consider include: more stringent local development requirements and/or building codes; precipitation patterns for the area at the time the project will be underway; soil types; slopes; layout of structures for the site; sensitivity of nearby water bodies; safety concerns of the stormwater controls (e.g., potential hazards of water in stormwater retention ponds to the safety of children; the potential of drawing birds to retention ponds and the hazards they pose to aircraft); and coordination with other site operators.

The approach and BMPs used for controlling pollutants in stormwater discharges from small construction sites may vary from those used for large sites since their characteristics can differ in many ways. Operators of small sites may have more limited access to qualified design personnel and technical information. Sites may also have less space for installing and maintaining certain BMPs. A number of structural BMPs (mulching, use of inlet protection, or silt fence) and non-structural BMPs (minimizing disturbance, good housekeeping) have shown to be efficient, cost effective, and versatile for small construction site operators to implement. As is the case with large construction sites, erosion and sediment control at small construction sites is best accomplished with proper planning, installation, and maintenance of controls.

MUST EVERY PERMITTEE HAVE HIS OR HER OWN SEPARATE SWPPP OR IS A JOINT PLAN ALLOWED?

The only requirement is that there be at least one SWPPP for a site that incorporates the required elements for all operators, but there can be separate plans if individual permittees so desire. ADEQ encourages permittees to explore possible cost savings by having a joint SWPPP for several operators. For example, the prime developer could assume the inspection responsibilities for the entire site, while each homebuilder shares in the installation and maintenance of sediment traps serving common areas.

IF A PROJECT WILL NOT BE COMPLETED BEFORE THIS PERMIT EXPIRES, HOW CAN I KEEP PERMIT COVERAGE?

If the permit is reissued or replaced with a new one before the current one expires, you will need to comply with whatever conditions the new permit requires in order to transition coverage from the old permit. This usually includes submitting a new NOI. If the permit expires before a replacement permit can be issued, the permit will be administratively "continued." You are automatically covered under the continued permit, without needing to submit anything to ADEQ, until the earliest of:

1. The permit being reissued or replaced;
2. Submittal of a Notice of Termination (NOT);
3. Issuance of an individual permit for your activity; or
4. ADEQ issues a formal decision not to reissue the permit, at which time you must seek coverage under an alternative permit.

WHEN CAN I TERMINATE PERMIT COVERAGE? CAN I TERMINATE COVERAGE (i.e., LIABILITY FOR PERMIT COMPLIANCE) BEFORE THE ENTIRE PROJECT IS FINISHED?

You can submit an NOT for your portion of a site providing: (1) You have achieved final stabilization (70% revegetation) of the portion of the site for which you are a permittee (including, if applicable, returning agricultural land to its pre-construction agricultural use); (2) another operator/ permittee has assumed control over all areas of the site that have not been finally stabilized for which you are responsible (for example, a developer can pass permit responsibility for lots in a subdivision to the homebuilder who purchases those lots, providing the homebuilder has filed his or her own NOI); or (3) for residential construction only, you have completed temporary stabilization and the residence has been transferred to the homeowner.